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RESEARCH IN SCHOOL HEALTH—FOCUS ON THE FUTURE*

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I understand that the planning committee spent some hours and covered a lot of territory exploring the various aspects of school health which might serve as a stimulating focus for this conference. Someone finally asked the question, "*Do we really know that we have healthier and happier children as a result of our school health programs?*" That's a good question. But a good answer, backed up by concrete evidence, is difficult to come by.

A glance at the mortality statistics reveals a spectacular reduction over the years in the mortality rates among children. There has been a 75 percent reduction in the 5-14-year-old group in the past 30 years, and a 16 percent reduction in California just since 1950. But how much of this can we attribute to school health programs? Some, of course. Certainly, the reductions in the more serious children's diseases account for a good deal of the progress. School health programs, especially in the past, put great effort into communicable disease control in the schools, and in community education concerning immunization. But the death rate in the 1-4-year-old group has come down even more rapidly in the same period—in fact, over 80 percent. So it would appear that factors operating in the community as a whole must be largely responsible for the great reductions in mortality among children.

"Reverse Effect" of Absence Data

Morbidity rates aren't much more helpful. Sickness rates from many of

the more serious communicable and infectious diseases, such as diphtheria, scarlet fever, pertussis, and the pneumonias, have come down as a result of widespread immunization and improved methods of treatment. But, as all absence data indicate, children are still sick a lot, especially from respiratory infections. The use of school absence data for evaluating the effectiveness of school health programs is fraught with difficulties, not the least of which is the oft-noted "reverse effect," that is, the schools with the better programs tending to show higher illness rates, because of higher standards for exclusion and better informed parents.

The situation regarding dental health has not improved, in spite of decades of tooth brushing drills, dental inspection, education on the evils of sweets, and the desirability of visiting the dentist twice a year. Dental caries marches on pretty much unabated and is still the most prevalent disease of children—except, that is, in the 11 or so communities in our State which have introduced fluoridation of community water supplies. Here a reduction in incidence is already showing up. In California, less than half of the children whose teeth need repair are receiving it, and because of the hopeless shortage of dental manpower in relation to our rapidly expanding population, the situation is bound to worsen until we drastically reduce the incidence of caries.

School's Role in Community Dental Health

We're very fortunate now to have such a simple, effective preventive

measure as fluoridation. We'd be pretty happy at the thought of reducing juvenile delinquency by 65 percent with some such simple means. The barriers against more rapid adoption of fluoridation by communities can only be combated by a better informed public. What is the appropriate role for the schools in this educational job? What have the schools done, to date, to help in this?

How about case-finding and correction of other physical defects? Here, surely we're on safer ground. The systematic and painstaking use of hearing and vision screening procedures are without a doubt among the greatest contributions of school health to healthier and happier children. This is an area which has stimulated a number of good evaluation and research studies in recent years, with a view to improving screening methods, determining the optimal ages and intervals for screening, and ways to minimize waste motion and increase accuracy. A good example of a successful collaborative study on vision screening is the one which has been carried out in Contra Costa County for the past few years. The results may prove to be the first major improvement in vision screening to take place in many years. It was accomplished through a close working relationship between technical personnel and the school and health departments.

Problem of Finding Correctable Defects

Studies using Selective Service findings to check on the overall effectiveness of case-finding procedures and correction of defects have, on the

*Presented at the California School Health Association Annual Conference, Fresno, November 8, 1958.

whole, been disappointing. After considering the weaknesses of a number of these and of eight major studies utilizing other re-examination techniques, Bronson Price⁽¹⁾ concludes that we have some answers, but as yet too few, to such questions as, "How well is our program finding the defects that are actually present?" and "How well are we succeeding in obtaining the care that is needed?" In the publication *School Health Services—A Selective Review of Evaluative Studies*, Price includes a section in which he presents concrete suggestions for future studies. This book is *must* reading for all who are interested in undertaking studies of school health programs. One great need he suggests is for long-term studies which would provide a clear-cut comparison of two groups: (1) a group exposed during school life to one or more health service procedures believed to improve health status, and (2) an initially similar group which was exposed to different procedures or to no procedures of a systematic kind.

Behavioral Sciences Needed

When one considers the amount of time and effort put into followup procedures by school nurses, there is appreciation for efforts made to ferret out the nature of the various kinds of parent resistance to following recommendations. Here we need the help of the behavioral sciences in identifying the various kinds of resistance and in helping to prepare the school health staff to deal more effectively with them. In a simple study carried out recently by a graduate student in the School of Social Welfare in Berkeley, it was found that very few of the resistant parents did not understand the recommendations given them by the nurses. Nurses were apparently doing a good job in transmitting and interpreting the recommendations to the parents. But the resistant parents reacted to the recommendations themselves, or to the manner in which they were made, with various combinations of fear, hostility, anxiety, or guilt. In a few cases, lack of funds to obtain private care, and negative attitudes toward clinic care, also were factors. We need much more study in this area of school health.

One could go on citing other bits of concrete evidence here and lack of

evidence there. I've not mentioned health education or mental health; they are equally as difficult to evaluate. I think it is not necessary to pursue the matter further to conclude that we have too little conclusive evidence of the contributions which our school health programs have made in the past to the health and happiness of the children of the country. This is, of course, a fault they have in common with other community health and welfare programs in attaining their objectives.

But there are some who say that folks engaged in school health have not been as curious about the effectiveness of their programs as have their confreres in other fields. Dr. Baumgartner,⁽²⁾ in her stimulating address last year to a joint session of the American School Health Association and the School Health Section of the APHA, said that, "The solid, scientific research on which certain other health programs are based has, with few exceptions, not characterized this field. It is shocking, but this is true."

Bronson Price, in connection with his review, says that changes in school health theory and practice during the past 30 years have been small, compared with the changes that occurred in the preceding decades. We've all heard quips about the time and effort spent on controlling communicable diseases that no longer exist or are of little consequence, and in rediscovering defects that are already known, etc. Some of these, and other criticisms, probably should be classified as undocumented assertions designed to make people mad, and also to make them ask, "Is there just a little bit of truth here?"

Taxpayers Want Evidence

In the days to come it's going to be increasingly important to have answers for the appropriating bodies and the taxpayers, as well as ourselves. A lot of money is being expended on school health. A study in 40 states revealed expenditures of \$58,000,000 annually. This figures out to about \$3 per pupil per year. Undoubtedly, it is much higher in California. When we consider that the figure was obtained by dividing reported expenditures made by school authorities by the average daily attendance in the 40 states, in rural as

well as urban areas, it is apparent that the per pupil expenditure in the schools with health programs must be very substantial. And furthermore, the figure does not include any of the funds being expended by health departments on behalf of children of school age. The comparable figure for per capita expenditure by health departments for services to the entire population is between \$6 and \$7.

There is probably not a school health service which does not believe that it needs, and could use wisely, more funds, but it can be said with certainty that more money is now being spent on health protective and promotional measures for children in the group 5-14 years than for any other age group in the population.

It is unnecessary to point out to people working in the school that we're undergoing an unprecedented population increase. Our California rate of increase, three times the national average, is creating all sorts of new problems, magnifying old ones, and leading to acute shortages of trained workers of all types. We're going to have to do a lot of thinking during coming years about how to give more service to more people with fewer qualified personnel.

Public Health Nursing Service

So far, in our State, the schools have fared better in the matter of public health nursing services than have health departments. On January 1st of 1958 over half (54 percent) of the 3,167 public health nurses employed by local agencies in California were employed by school authorities, with 39 percent by local health departments and 7 percent by visiting nurse associations. And the proportion of school employment has been increasing rather rapidly since 1953. Here, again, the figures do not include services rendered to schools by health department nurses. Children in the 5-14 age bracket are, therefore, receiving the lion's share of public health nursing services.

These facts place a heavy burden upon boards of education, school administrators, health officers, and on the nursing profession, to justify this use of scarce professional personnel and to show that the very best use is being made of this knowledge and skill.

From studies of the duties and responsibilities of school nurses in California reported this year, it would appear that school administrators and their nurses are seeing more eye-to-eye than they used to, but I take it that the nurses still feel that there is room for improvement in some respects. Greater use of the methods of operational or administrative research would doubtless be a good thing in school health, as it is proving to be in other health programs. It helps to point up the places where effort is being wasted in unproductive activities, or where necessary and useful activities are costing too much because they've been carried out by expensive personnel. An example might be the clerical functions performed by public health nurses at a cost of \$4.50 per hour. Sometimes when the unit cost of a procedure is determined, it is pretty apparent that it's not worth it in terms of the contribution it makes to the objectives of the total program.

However, the roles of research and evaluation in the school health of the future must go beyond appraising the value of current activities and their justification, and in aiding in efficient administration.

Keeping programs up to date, aimed at current major problems and constantly "on course," involves both the utilization of research originating outside the schools in the various related disciplines and of research and evaluation carried out in the schools involving the personnel connected with school health programs.

Adolescents and Mental Health

Two areas which would seem to have claims for major attention at present are problems of adolescents, through more effective health programs at the secondary level, and mental health in all grades.

Most of our school health "wad" has been shot at the elementary level. Why? Adolescence is a critical period of rapid growth and development during which vulnerability to both physical and emotional problems is high. While 30 years ago communicable diseases affected mostly young children who had the lowest immunity levels, now it is the neglected adolescent who gets diphtheria. Every consideration is given in our society to assure an adequate diet for the rapidly growing infant and young child,

but little thought is given to the very great nutritional needs of the more rapidly growing adolescent.

J. A. Johnston,⁽³⁾ of Detroit, who has been doing metabolic studies on adolescents for years, associates the upturn in tuberculosis morbidity and mortality in adolescents with blood plasma deficiencies in calcium and nitrogen, the result of inadequate intakes of these nutrients in the rapidly growing organism. He found a tendency to negative balances during periods of rapid growth, and points out that while adolescents usually have big appetites, they often eat very badly from a qualitative standpoint when left to their own devices.

Adolescents—Most Neglected Group

J. Roswell Gallagher,⁽⁴⁾ Chief of the Adolescent Unit of the Children's Medical Center at Harvard Medical School and a longtime student of the special medical problems and the health needs of adolescents, continues to hammer away at the medical and public health professions and the schools about the needs of this most neglected age group. Responsible people in the school health field are also speaking up more insistently. For example, a report of the APHA School Health Section, published last year in the Bulletin of the National Association of Secondary School Principals,⁽⁵⁾ recommends for secondary schools:

1. Good medical supervision, not only for the athletes but for all students; disease and injury control; health education geared to the interests and needs adolescents; and promotion of emotional health;
2. That services be carried out by personnel with special training in understanding adolescents and in dealing with them;
3. And that they help to initiate and lend their aid to all efforts designed to promote a wide understanding of the effects of problems of growth and development and emotional factors upon learning, physical health, and effective living during adolescence.

During the past decade, the literature on the personality characteristics of adolescents is almost as voluminous

as it was on their physical growth the previous 10 years or so. Yet, how much of this knowledge and theory has found application in the schools, the only institution in our society, other than the home, which reaches all adolescents?

Mental Health—School's Business

The seriously maladjusted teenagers, those who fail in the struggle for some measure of maturity during school years, are usually those whose earlier childhood problems were unresolved. Irene Josselyn⁽⁶⁾ speaks of the adolescent's "limited visibility in the maze in which he finds himself, due to a fog resulting from the condensation of preadolescent problems." Too many school people throw up their hands and say—"These are essentially problems these youngsters brought with them when they first entered school! It's the responsibility of the homes and the community!" But it is equally true that an enormous number of the emotional problems of this age are what might be called "schoologenic," that is, generated by the fact that they are in school and have to be in school because of compulsory education. The policies of the school system, the administrative skill of the principal, the personality of the teacher, and the emotional climate in the classroom, all have significant effects upon mental health; and, whether they like it or not, the schools are right in the middle of the mental health business.

I find myself in sharp disagreement with those who make public pronouncements about its being the business of teachers to *teach*, and not to be amateur psychiatrists. They remind me of the parents' advice to a teacher "to learn him, not smell him."

The intrusion of mental health concepts into the policies and procedures of social agencies, hospitals, and public health, also has met with resistance. Always, the most common excuses given for failure to accept responsibility are much the same—insufficient time, and that the responsibility lies somewhere else. But the staggering number of mental health problems in this country, the perfectly evident fact that they originate mostly in childhood and that they interfere with the learning ability of so many children, are all factors which are tending to overcome resist-

ance to change in the schools as they have elsewhere.

Changing Concepts of Child Care

Mental health concepts are changing many aspects of child care. Examples are seen in modified hospitalization practices for children, more liberal and flexible visiting hours, and in rooming-in arrangements for mothers and newborn infants. Rigid feeding schedules have disappeared and there is a more relaxed attitude about toilet training, etc. Major changes in child health conferences are on the way, with less emphasis on weighing and measuring, and physical examinations, and more on counseling and education of parents with regard to behavior problems and normal development of young children. Much of the progress that has been made in preventive mental health work with infants and young children⁽⁷⁾ has involved changes in policy, discontinuance of time-honored procedures which were shown to be undesirable, and adding flexibility to methods and policies which were previously rigid, or reflected lack of appreciation of individual variations and needs. The changes have made a lot of children and parents happier.

It is still too early to know the long-range effects on the mental health of these children. Here is an area for research in which the schools would need to be involved—an appraisal of the differences, if any, among children whose preschool years were less fraught with emotional stress. A study of a cohort of pupils, beginning with school entrance and following through secondary school, would make an important contribution to the epidemiology of emotional problems, and would add to our present inadequate knowledge about the natural history of good and poor emotional adjustment and the factors in the home, school, and community which play a part. Most prevalent theories about the etiology of these problems are based on fragmentary evidence obtained retrospectively in persons who already have serious problems.

Questions Schools Can Answer

The schools are in an admirable position to contribute importantly to our knowledge of mental health by helping to answer such questions as these: How many children in the dif-

ferent age groups have various kinds of emotional problems? What kinds of children are they? What kinds of homes do they come from? Are there signs and symptoms among kindergarten entrants which are prognostic of future serious problems? Why is it that boys have more frequent and serious behavior problems than girls? What are the stresses and strains in the school environment that contribute to these problems? What are the appropriate functions of the schools in connection with case-finding and treatment and in prevention? What are desirable administrative relationships between the health service and the guidance service?

Experimentation in small ways can be undertaken by any member of a staff and can be a tremendous aid in speeding up progress. An inquiring state of mind and a little freedom within the prescribed policies and procedures are all that are necessary.

The carrying out of major research, of course, requires more. An inquiring mind, a ferment of discontent and doubt, is the first and most important ingredient, but some expert help and money are required also. During just the past few years there has been a tremendous increase in the amount of research being carried out in public health by operating agencies at the state and local levels. A great wave of interest in evaluation and research has enveloped us. Very importantly, Congress has also become research-minded in recent years and has supported research in the health fields to a degree never dreamed possible before. The National Institutes of Health are administering research grants and stimulating local and state health agencies to undertake research in many fields. I see no reason why school health should not benefit from this assistance, just as other aspects of health are benefiting.

The question raised by your planning committee has not been answered, but the asking of the question is symptomatic of the introspective ferment that is stirring these days in the health and education professions. This is a healthy state of affairs. I believe it was Alfred North Whitehead who observed, in his *Aims of Education*, that all learning is essen-

31 Counties Called Rabies Areas By State Regulation

Twenty-five California counties have again been declared rabies areas for another year by the State Health Department. This action has been taken on the recommendation of the department's six regional advisory committees.

The affected counties are Amador, Butte, Colusa, El Dorado, Glenn, Lake, Los Angeles, Madera, Mariposa, Mendocino, Merced, Monterey, Napa, Nevada, Placer, San Joaquin, Santa Clara, Shasta, Solano, Sonoma, Sutter, Trinity, Tuolumne, Ventura, and Yuba.

Redeclarations are issued in counties where a case of animal rabies has been reported during the past 12 months. Upon such designation the law requires the vaccination and licensing of all dogs over four months old.

A newly declared rabies area is Stanislaus County.

Removed from the list of rabies areas December 2d were the counties of Calaveras, Fresno, Kings, Tulare, San Benito, Santa Cruz and Tehama.

There are a total of 31 counties currently designated as rabies areas, five of which will be considered for redeclaration in March and April of next year. These five are San Luis Obispo, Alameda, Contra Costa, Marin and Sacramento.

tially a setting in order of a ferment already stirring in the mind.

REFERENCES

- (1) Price, Bronson. *School Health Services. A Selective Review of Evaluative Studies*. Children's Bureau Publication No. 363, Dept. of Health, Education, and Welfare. Supt. of Documents, U. S. Government Printing Office, Washington, D. C., 1957.
- (2) Baumgartner, Leona. "School Health—Yesterday and Tomorrow." *Am. J. Public Health* 48, pp. 771-774, June, 1958.
- (3) Johnston, J. A. 1953 *Nutritional Studies in Adolescent Girls and Their Relation to Tuberculosis*. C. C. Thomas, Springfield, Ill.
- (4) Gallagher, J. Roswell, et al. "Recent Contributions to Adolescent Medicine." *New England J. Med.* Vol. 259, pp. 24-31; 74-81; 123-130. July 3, 1958; July 10, 1958; July 17, 1958.
- (5) American Public Health Association, Report of Committee on School Health. "Health Programs for Secondary Schools." *Bull. Nat. Assoc. Secondary School Principals* 41:92-106, 1957.
- (6) Josselyn, Irene. "Psychological Aspects of Adolescence." *Amer. J. of Orthopsychiatry* 26:478-485, 1956.
- (7) Krugman, Morris, ed. *Orthopsychiatry and the School*. American Orthopsychiatric Association, Inc., New York, 1953, p. 161.

Bat Bite Confirmed Cause Of Human Rabies Death

The State Department of Public Health has confirmed the isolation of rabies virus from the brain of a 53-year-old woman, resident of Butte County, who died on November 4, 1958, as the result of being bitten on the finger by a rabid bat on August 30th.

Microscopic examination of brain material by the victim by the department's Berkeley laboratories revealed inclusion bodies not typical of Negri bodies. Inoculated mice died in eight days with typical Negri bodies being found on microscopic examination. Neutralization test results in mice, using first mouse passage material and specific rabies antiserum, were positive. The department laboratories officially confirmed the isolation of rabies virus from the brain of the victim on December 1, 1958.

The woman observed a bat lying on the ground beside a small uncovered porch of her home. The bat appeared to have something wrong with it. To prevent its being molested by her two dogs the woman picked it up and attempted to place it in a nearby tree without success. During this time she was bitten on the finger. She phoned a veterinarian, asking if he could set what she assumed was the bat's broken wing, and was advised to place it in the refrigerator and to notify the Butte County Health Department as soon as possible.

The bat was shipped to the department's laboratories in Berkeley where a report of inclusion bodies typical of Negri bodies was made on September 3d.

The woman victim was given hyperimmune antirabies serum intramuscularly on September 2d. The following day she began receiving daily injections of duck-embryo rabies vaccine. Fourteen doses were given in all. The course of vaccine treatment was complicated by an allergic reaction to the antirabies serum for which she was given antihistamines for relief.

Following completion of vaccine treatment and cessation of antiserum complications, the bite victim apparently remained well until about October 24, when she developed pain and numbness in her left arm extending

down into two fingers and thumb and to the third thoracic vertebra. Complications persisted, resulting in gastrointestinal pain, gradual decrease in use and control of extremities, weakness, and difficulty in swallowing and breathing. Death occurred 67 days after exposure.

This case represents the most complete documentation of transmission of rabies from a proven rabid insectivorous bat to man or animal. Two other human rabies deaths have occurred in persons exposed to insectivorous bats, but documentation in neither case is as complete as in the Butte County death.

This represents the 106th recorded human victim of rabies to die in California since 1899. Animal rabies was first confirmed in California by laboratory examination in Los Angeles County in 1898.

The bat in this recent case was identified as a free-living noncolonial *Lasiorycteris noctivagans*, or silver-haired bat. It is a rarely observed species known to be distributed through, but not limited to, the Sierra, Mt. Lassen, Mt. Shasta, and Klamath ranges, typically foraging for insects along and around the edges of forests.

Rabies was first identified in insectivorous bats in the United States in Florida in 1953. Numerous isolations of rabies have been made from insectivorous bats in the United States (19 states), and in a few from Canada and other parts of the world since that date.

The first isolation of rabies from a bat in California was in 1954 from a *Tadarida mexicana* (Mexican free-tail bat) collected in Sonoma County. Subsequent recognitions have brought the total number of rabid bats to 16, involving five known bat species and seven California counties.

Attorney General Gives Opinion Re Hospital Licensing Records

At the request of Dr. Malcolm H. Merrill, Director of the California State Department of Public Health, the Attorney General has issued an opinion regarding the interpretation that should be placed on those sections of the Health and Safety Code having reference to departmental records of licensed hospitals, includ-

NIH Funds Granted for Setting Up Epidemiology Training Center

A five-year grant of \$383,000 from the National Institutes of Health has been awarded the California State Health Department for the establishment of an Epidemiology Training Center, the first such project in the Nation by a state health department.

The center will provide opportunities for graduate physicians, biostatisticians, public health nurses, veterinarians, social scientists, and others to learn through practical experience in the field and in the laboratory.

Epidemiology is the branch of medicine and public health that investigates the causes of illness and disease, their distribution in the population, and provides the guide for prevention and treatment. It also provides the basis for public health program direction.

The Epidemiology Training Center facilities will provide: (1) opportunity for practical research; (2) orientation to, and experience in, the development of epidemiologic concepts in relation to newer areas of public health interest, such as prevention of accidents and control of alcoholism; (3) participation in interdisciplinary study of public health problems in an operating health agency; and (4) an area of recruitment of individuals interested in epidemiology, either as a career or as a supplementary skill to other professional interests.

Trainees will have opportunity to observe the use of epidemiological methods in many of the current departmental studies such as the effectiveness of child health conferences; the etiologic factors in cancer, prevention of blindness and accidental poisonings; and the evaluation of the treatment of alcoholism, coronary heart disease, and acute respiratory disease of virus origin.

The grant funds will be used for trainee stipends, the salaries of training center personnel, office supplies and equipment.

ing county hospitals (Hospital Licensing Act of 1945).

The opinion states that information relating to either private or county hospitals may not be disclosed by the department except in disciplinary proceedings against licensees.

Death Ends Public Health Career Of Dr. Thomas R. Perdue

Dr. Thomas R. Perdue, Assistant Health Officer and Chief of the Division of Disease Control, Alameda County Health Department, died by his own hand at his home in Castro Valley on November 21, 1958. He was 34. He is survived by his wife, Hazel, and their three children, David 9, Judy 7, and Steven 5.

Dr. Perdue served as chief of the Alameda County Health Department's health services division until a departmental consolidation in 1957. He organized and supervised field tests of Salk polio vaccine in 1954 when several thousand Alameda county children were inoculated, and he helped to spearhead the polio vaccination campaign in the spring of 1957.

He was a graduate of the University of Kansas Medical School and joined the Alameda County Health Department staff five years ago after serving as health officer in Kansas and Montana. He received his M.P.H. degree from the University of California School of Public Health in June, 1955. Honorary fraternities to which he belonged are Phi Beta Kappa; Delta Omega, UC School of Public Health chapter; Alpha Omega Alpha; and Summerfield Scholars.

Public health will feel the loss of an extremely capable and brilliant worker.

Commonwealth Funds Granted For Nurse Scholarships

The National League for Nursing announces receipt of a grant of \$622,923 from the Commonwealth Fund, New York, for a three-year extension of the NLN fellowship program of educational awards to nurses undertaking graduate study. The fund has supported this program since 1955 to aid in overcoming a critical shortage of nurses prepared for administration in nursing service and education, teaching, and research in nursing.

Applications for NLN fellowships for study beginning in September, 1959, are received up to January 15th of that year. These should be sent to the National League for Nursing, Inc., 2 Park Avenue, New York 16, New York.

Willford G. Curry Dies

Willford G. (Bill) Curry, sanitary engineering associate with the State Department of Public Health, died on December 1, 1958, in Berkeley of a coronary attack. He was 58.

Mr. Curry had been associated with the State since 1947. He was water and sewage plant supervisor at Folsom Prison until May, 1952, when he was employed in the Bureau of Sanitary Engineering.

During World War II he served as a consultant to the U. S. Army on water supply and treatment in North Africa, Iran, and Iraq. At the outbreak of World War I, after one year of study at the University of Pennsylvania, he enlisted in the U. S. Army and served throughout the war, principally with the French army.

He is survived by his wife, Romayne, of Berkeley; one son, Clark, by his first marriage; and two grandchildren. His son is an engineer presently stationed in Trinidad.

Because of his pleasing personality and friendly manner Bill was able to carry out his work with an effectiveness that was apparent to everyone. In the fields of domestic water and sewage disposal he was recognized statewide as an excellent plant operator and expert troubleshooter.

For the past four years he has been chief editor of the California Sewage and Industrial Waste Association's *News-letter*.

E. Robert Stallings Appointed To Alcoholic Rehab Committee

Appointment of E. Robert Stallings, County Manager of San Mateo County, to the Alcoholic Rehabilitation Advisory Committee of the State Department of Public Health was announced in December by Malcolm H. Merrill, M.D., State Director of Public Health.

Mr. Stallings, whose appointment will be effective in January, will replace Sidney Cruff, Selma rancher and former member of the Fresno County Board of Supervisors.

Mr. Stallings, 42, is a graduate of Duke University and received his master's degree in public administration at Stanford University in 1937. He held several governmental administrative positions in Los An-

SPECIAL CENSUS RELEASES

Current Population Reports, Special Censuses of California Cities, Series P-28:

Merced County: Atwater (1230); *Orange County:* Fullerton (1229).

Current Population Reports, Population Estimates, Series P-25:

Provisional Estimates of the Population of the United States, January 1, 1950 to September 1, 1958. October 10, 1958 (184).

Estimates of the Civilian Population of Voting Age for States, November 1958. October 22, 1958 (185).

Estimates of the Population of States and Selected Outlying Areas of the United States, July 1, 1957 and 1956. October 27, 1958 (186).

Illustrative Projections of the Population of the United States, by Age and Sex, 1960 to 1980. November 10, 1958 (187).

Provisional Estimates of the Population of the United States, January 1, 1950 to October 1, 1958. November 7, 1958 (188).

Provisional Estimates of the Population of States and Selected Outlying Areas of the United States, July 1, 1958. November 13, 1958 (189).

Estimates of the Population of the San Francisco-Oakland and San Jose Standard Metropolitan Areas, July 1, 1956. November 26, 1958 (190).

Current Population Reports, Population Characteristics, Series P-20:

Fertility of the Population, March 1957. August 8, 1958 (84).

Mobility of the Population of the United States, March 1957 to 1958. October 13, 1958 (85).

Households and Families by Type, 1950 to 1958. November 12, 1958 (86).

Marital Status and Family Status, March 1958. November 14, 1958 (87).

Household and Family Characteristics, March 1958. November 17, 1958 (88).

Copies of these releases may be obtained from: Library, Bureau of Foreign and Domestic Commerce, United States Department of Commerce at 419 Customs Building, 555 Battery Street, San Francisco, California or Room 450, 1031 South Broadway, Los Angeles, California.

In ordering, specify series and number as shown in parentheses. These numbers are not population figures.

geles and San Diego Counties before accepting the county manager position in Redwood City in 1951.

UNDERSTATEMENT OF THE WEEK

Nicotine has no therapeutic value. —*Journal of the American Medical Association*, Vol. 168, No. 14, page 1955.

St. Vincent's Hospital in L. A. OK'd for Open Heart Surgery

St. Vincent's Hospital in Los Angeles has been approved as meeting the criteria for open heart surgery as stipulated by the Advisory Committee to the State Health Department's Crippled Children's Services. It is the third hospital in California approved by the committee to perform this surgery using the artificial heart-lung machine with which the blood circulation is bypassed around the heart during an operation.

The hospital also was approved as a new center for the diagnosis and treatment of congenital heart disease under the Crippled Children Services. This brings to a total of 11 the number of approved centers, six in the San Francisco Bay area and five in Southern California.

The Advisory Committee for Crippled Children's Services has adopted rigid criteria for the approval of a congenital heart diagnostic and treatment center, and even more rigid criteria for the additional approval for open heart surgery.

Progress in this field is making such rapid strides that all types of heart surgery will be available in California in the near future. At the present time a few selected California children with the most complicated heart defects are still being sent to Minnesota for surgery by the Mayo Clinic or to the University of Minnesota, the present leaders in the field.

At present the approved diagnostic and treatment centers are Stanford Hospital (also open heart), Moffitt Hospital, Children's Hospital, and Mt. Zion Hospital, all of San Francisco; Children's Hospital and Merritt Hospital, both of Oakland; and in Los Angeles, Children's Hospital, White Memorial Hospital, University of California (also open heart), Cedars of Lebanon Hospital, and St. Vincent's.

"The nucleus of major health problem, bodily injuries and traumatic deaths, is tersely described in the definition of *pococurantism*; a rarely used English word taken from the Italian language and derived from two Latin words: *paucus* meaning little, and *curare*, to care. Pococ-

Reported Cases of Selected Notifiable Diseases California, Month of November, 1958

Disease	Cases reported this month			Total cases reported to date		
	1958	1957	1956	1958	1957	1956
Series A						
Amebiasis	34	152	100	949	1,933	915
Coccidioidomycosis	21	14	19	196	172	179
Measles	857	476	738	34,820	53,013	31,391
Meningococcal infections	9	21	11	172	169	216
Mumps	996	906	1,500	16,207	18,455	32,908
Pertussis	199	159	101	3,641	2,585	2,006
Rheumatic fever	15	6	14	132	126	121
Salmonellosis	150	71	60	1,038	1,467	1,020
Shigellosis	225	277	112	1,809	1,743	1,588
Streptococcal infections, respiratory	1,416	483	506	13,261	7,403	4,986
Trachoma	13	—	1	19	81	5
Series B						
Chancroid	5	9	4	82	61	81
Conjunctivitis, acute newborn	1	1	1	19	5	8
Gonococcal infections	1,433	841	1,142	16,039	14,603	14,135
Granuloma inguinale	—	—	—	8	7	1
Lymphogranuloma venereum	1	1	—	29	18	27
Syphilis, total	493*	335	420	5,677*	5,504	5,658
Primary and secondary	81	32	NA	587	432	NA
Series C						
Anthrax	—	—	2	—	1	2
Brucellosis	5	3	4	37	44	31
Diarrhea of the newborn	2	7	—	21	49	11
Diphtheria	—	1	—	6	9	28
Encephalitis	22	26	19	522	508	507
Food poisoning (exclude botulism)	70	134	71	1,011	1,223	1,698
Hepatitis, infectious	158	81	196	1,815	1,699	1,842
Hepatitis, serum	6	8	7	103	93	84
Leprosy	1	—	2	13	13	9
Leptospirosis	1	4	—	3	5	3
Malaria	1	5	6	22	38	49
Meningitis, viral or aseptic	118	NA	NA	918	NA	NA
Poliomyelitis, total	47	30	99	306	644	2,045
Paralytic	42	24	60	232	274	1,310
Nonparalytic	5	6	39	74	370	735
Psittacosis	2	3	5	18	28	42
Q fever	—	—	1	35	39	54
Rabies, animal	8	12	11	154	174	273
Rabies, human	1	—	—	1	1	—
Rocky Mountain spotted fever	—	—	2	—	—	3
Tetanus	3	3	5	42	30	32
Trichinosis	—	1	—	5	8	9
Tularemia	—	—	—	4	2	4
Typhoid fever	21	6	6	82	77	97
Other ¹ Botulism	—	—	—	1	2	5
Plague	—	—	—	—	—	1
Relapsing fever	—	—	—	—	3	—
Typhus fever (endemic)	—	—	—	3	9	3
Series D						
Epilepsy	345	137	306	3,786	2,730	3,328
Tuberculosis	381	504	—	5,713	6,143	—

* These spaces will be used for any of the following rare diseases if reported: botulism, cholera, dengue, plague, relapsing fever, smallpox, typhus fever, yellow fever.

* Excludes 74 cases found positive by special serologic survey (Mexican National farm workers at Border Reception Center, El Centro).

* Excludes 7,059 cases found positive by special serologic survey (Mexican National farm workers at Border Reception Center, El Centro).

* 1956 data not comparable. NOTE: The diseases are grouped into Series A, B, C, and D to simplify processing in the local health departments. The details of this classification are given in the Handbook of Morbidity Reporting Procedures and Epidemiologic Follow-up for Local Health Departments, 1958 Revision.

CORRECTION: The figure for tuberculosis in the October report which read 5,722 should have been 5,332.

rantism is a state of mind that cares little. It is an attitude of indifference, of disinterest, of apathy and of men-

tal indolence."—Robert H. Kotte, M.D., *News-Letter, American Academy of Pediatrics*, Vol. 8, No. 3.

Public Health Positions

Alameda County

Chief Public Health Analyst: Salary range, \$505 to \$613. Directs the records and statistics unit of the county health department. Requires college graduation and three years experience in statistical analysis of public health data, one year of which has been supervisory. Examination by written test and interview.

Public Health Analyst II: Salary range, \$436 to \$530. Preparation and analysis of tabulations, and presentation of public health data. Requires college degree plus two years of technical research or statistical experience (one of which must have been in the public health field), or a master's degree in biostatistics. Examination to include a written test (this can be administered in the locale of the candidate) and a personal interview.

Public Health Medical Officer: Salary range, \$821 to \$950. To work as an administrator of a county health department bureau. Requires California medical license, plus one year of graduate public health education, or one year of medical experience in public health. Examination by interview only.

Public Health Nurse: Salary range, \$436 to \$505. Generalized public health nursing program. Many positions include school nursing. Requires California public health nursing certificate or eligibility therefor. Examination by interview only.

Sanitarian: Salary range, \$436 to \$505. General sanitation program covering all sanitation services in specific geographical district. Requires California certification, plus college degree in sanitary science or related field. (Eligibility for next state examination acceptable.)

For further information regarding any of these positions write to Alameda County Civil Service Commission, 12th and Jackson Streets, Oakland 7, California, or phone HIgate 4-0844, Extension 255.

Contra Costa County

Sanitarian: Salary range, \$415 to \$505. Requires certificate of California registra-

tion. The position is with the county health department located in Martinez. Easy commute to Berkeley, San Francisco, and other Bay area communities. Liberal employee benefits include three weeks paid vacation, sick leave, health plan, combination social security and retirement plan, and credit union. Apply to Contra Costa County Civil Service Commission, Box 710, Martinez, California, or phone Martinez 3000, Ext. 415.

Orange County

Public Health Microbiologist: Salary range, \$395 to \$489. Requires California Public Health Microbiologist license and California Milk Certificate. Apply to the Orange County Personnel Department, 801-C North Broadway, Santa Ana, California.

San Jose City

Public Health Nurse: Salary range, \$426 to \$532. Starting salary to depend on previous experience. Program includes public school nursing services. Public health certificate necessary. Private car allowance or city car available. Apply to Miss Margaret F. Nelson, Chief Public Health Nurse, 151 West Mission Street, San Jose, California.

Stanislaus County

Sanitarian: Salary range, \$382 to \$460. Starting salary to depend on qualifications. Requires California registration. Immediate vacancy.

Public Health Microbiologist: Salary range, \$382 to \$460. Starting salary to depend on qualifications. Requires California certificate as Public Health Microbiologist. Immediate vacancy.

Persons interested in these positions should contact Stanislaus County Personnel Office, P. O. Box 639, Modesto, California.

"* * * the two ages most amenable to change in dietary habits are the grade-school child and the young pregnant woman."—*Journal of the American Medical Association*, Vol. 168, No. 12, page 1658.

"We have the diagnostic tools and the therapeutic agents to control and even eradicate syphilis. But we are failing because of our own complacency about the disease, because of neglected educational programs, especially for the teenagers, and because of lack of interest or funds to find and treat the affected persons."—*Herman Beerman, M.D., A.M.A. Archives of Dermatology*, August, 1958.

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